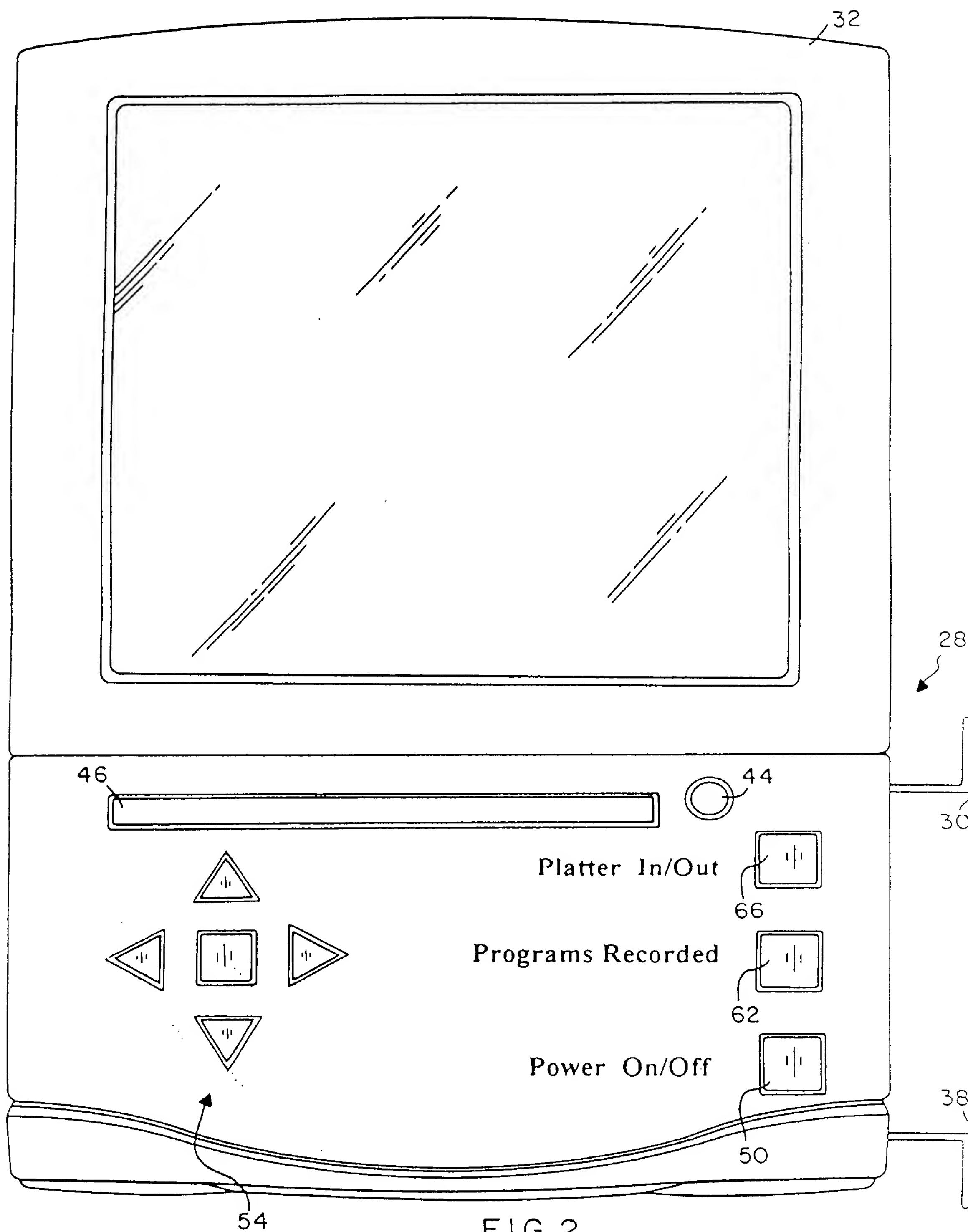


FIG. 1



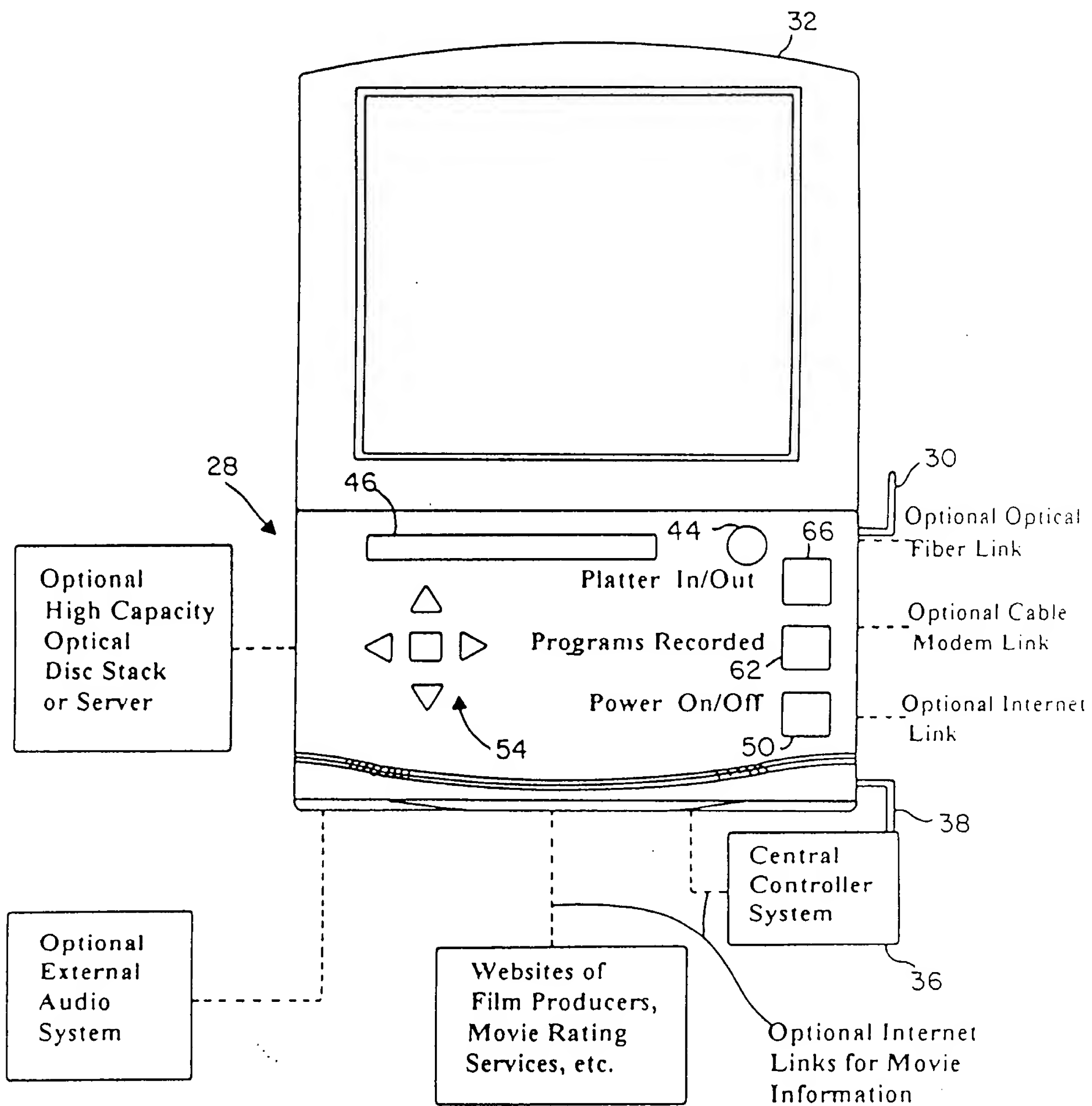


FIG. 2A

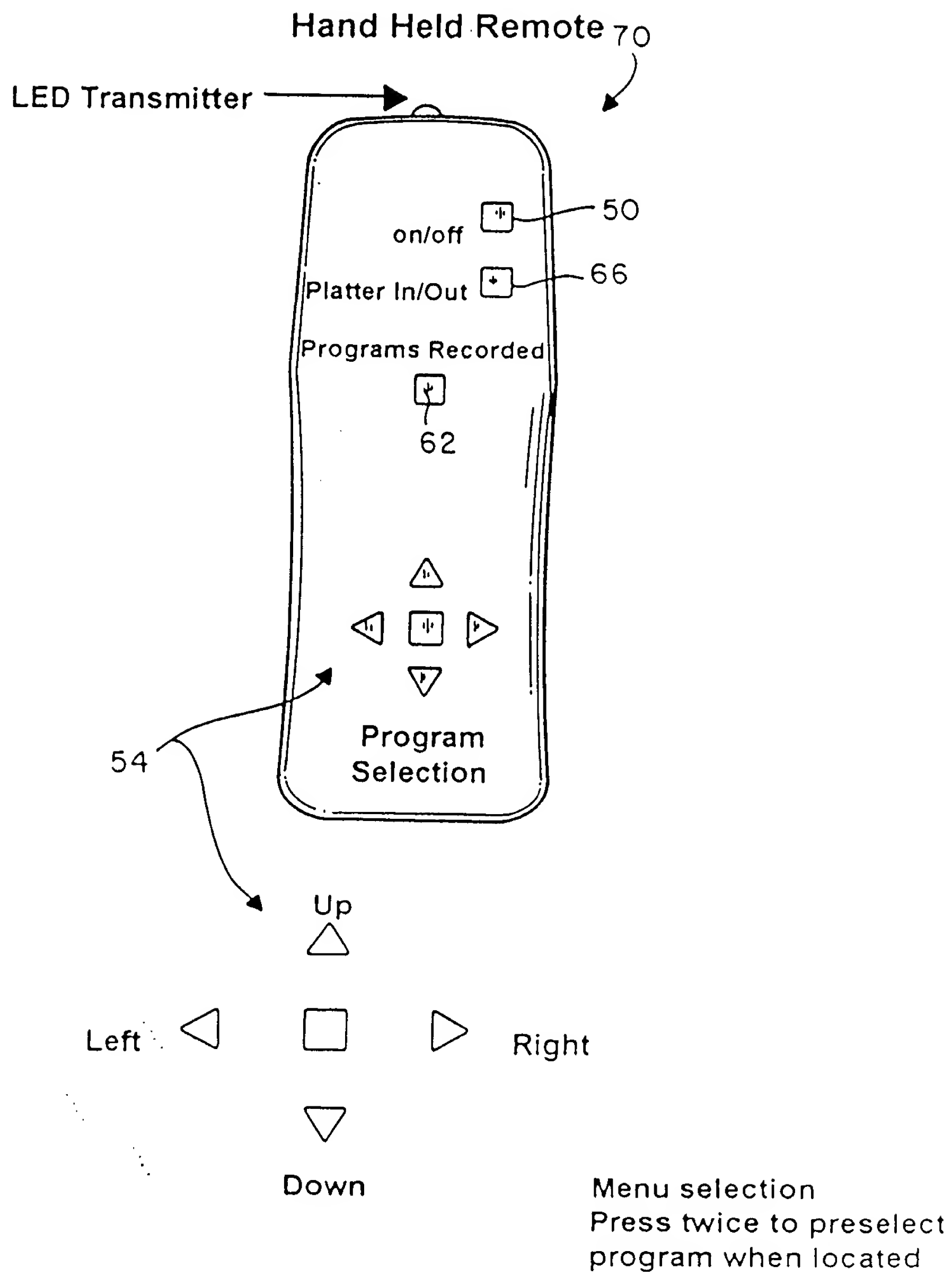


FIG. 3

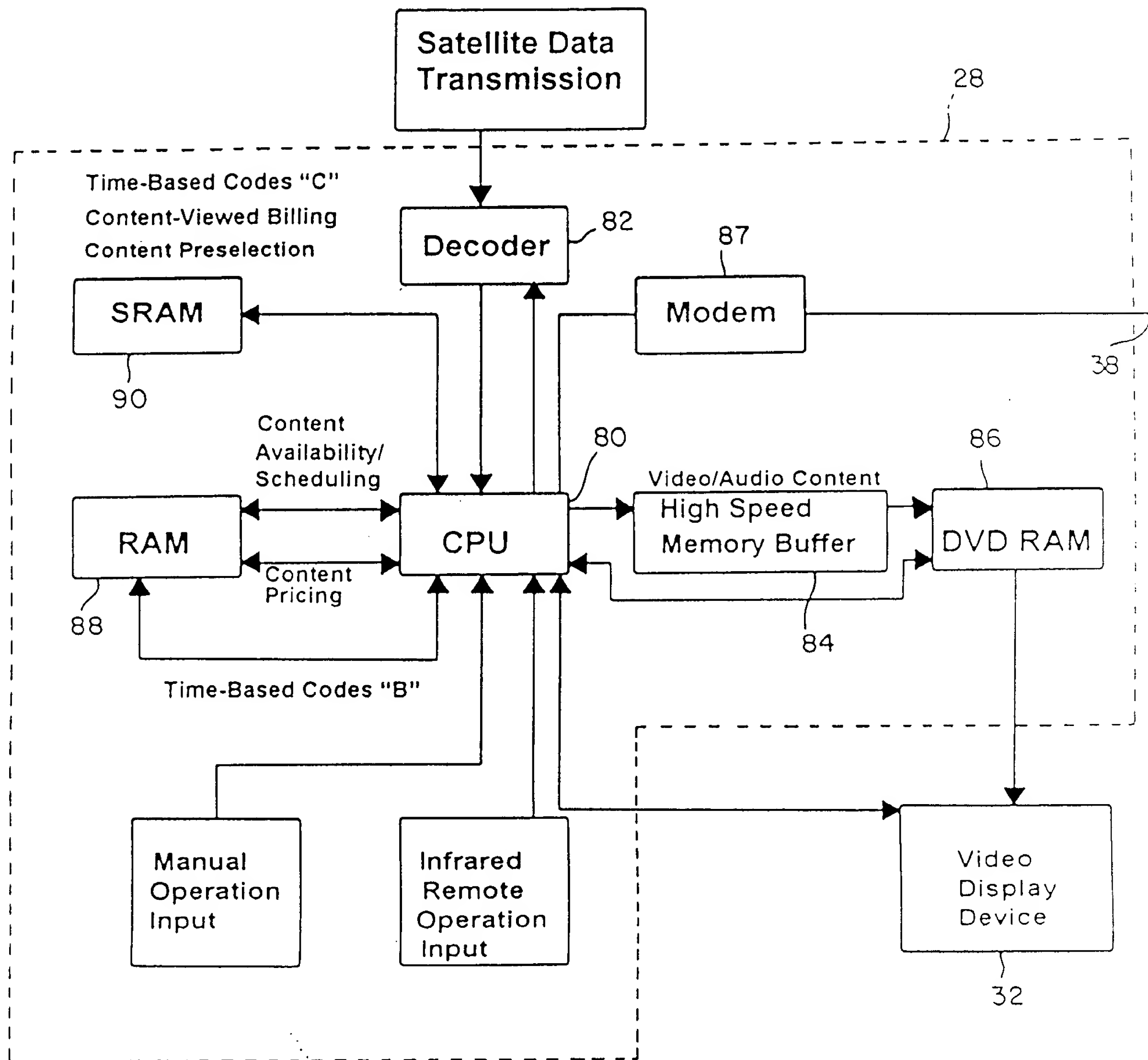


FIG. 4

☐ Programs Recorded

☐ Available Movies

1. New Releases

☐ Comedy

☐ Drama

☐ Action

☐ Documentary

2. Classics

☐

☐

↓

100

FIG. 5

SLOT	PROGRAM
1	Blank Disc
2	"Return of the Jedi"
3	No Disc
4	"To Sir with Love"
5	Blank Disc
6	"Sleepless in Seattle"
7	"Dave"
8	Blank Disc
9	No Disc
10	"True Grit"

110

FIG. 6

New Releases/Comedy (20 Titles)			
1	Title #1	120 mins.	PG
2	Title #2	98 mins.	R
3	Title #3	102 mins.	PG-13
4	Title #4	108 mins.	PG
5	↓	↓	
6			
7			
8	↓	↓	

120

FIG. 7

LEVEL I TIME-BASED SECURITY CODES

A	B	C
One 32 bit code in each movie header X 12 months X 100 years = 1200 32 bit codes.	One 32 bit code for each month chosen at the beginning of each month and transmitted by DBS.	One 32 bit code delivered each month by phone/ modem with billing query from central controller system. C provided only when customer is in good standing.

FIG. 8

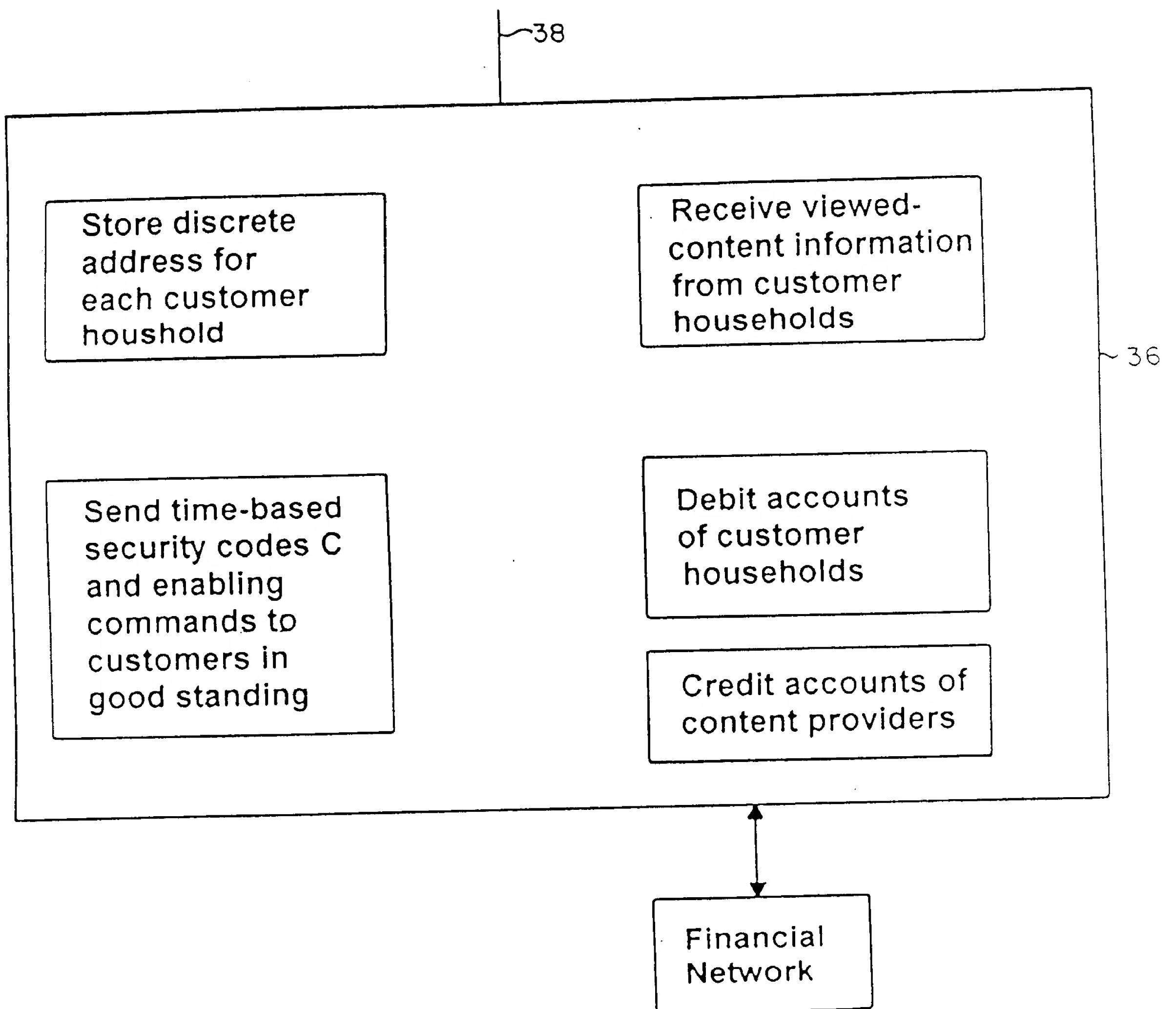


FIG. 9

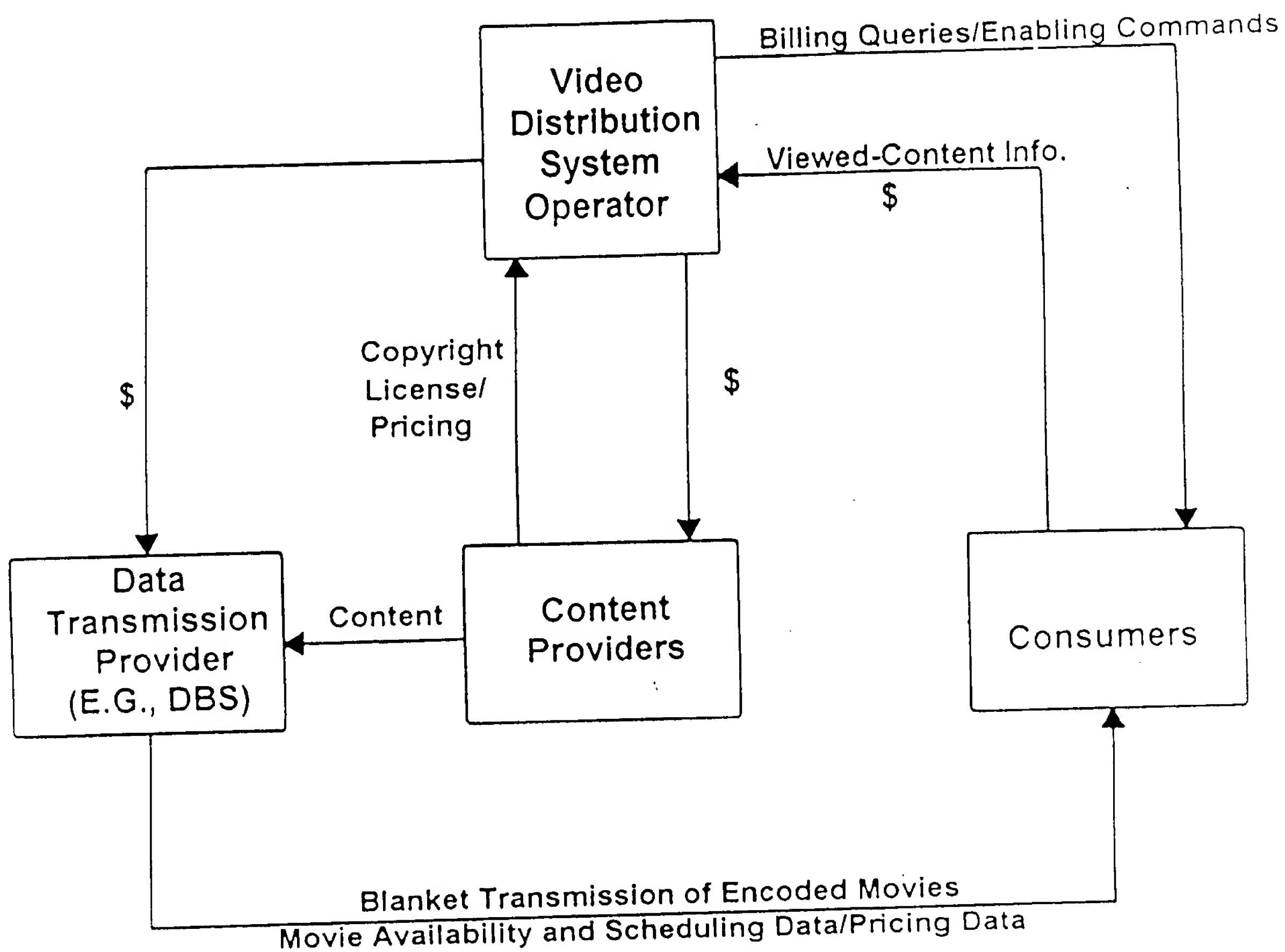


FIG. 10

FIG. 11

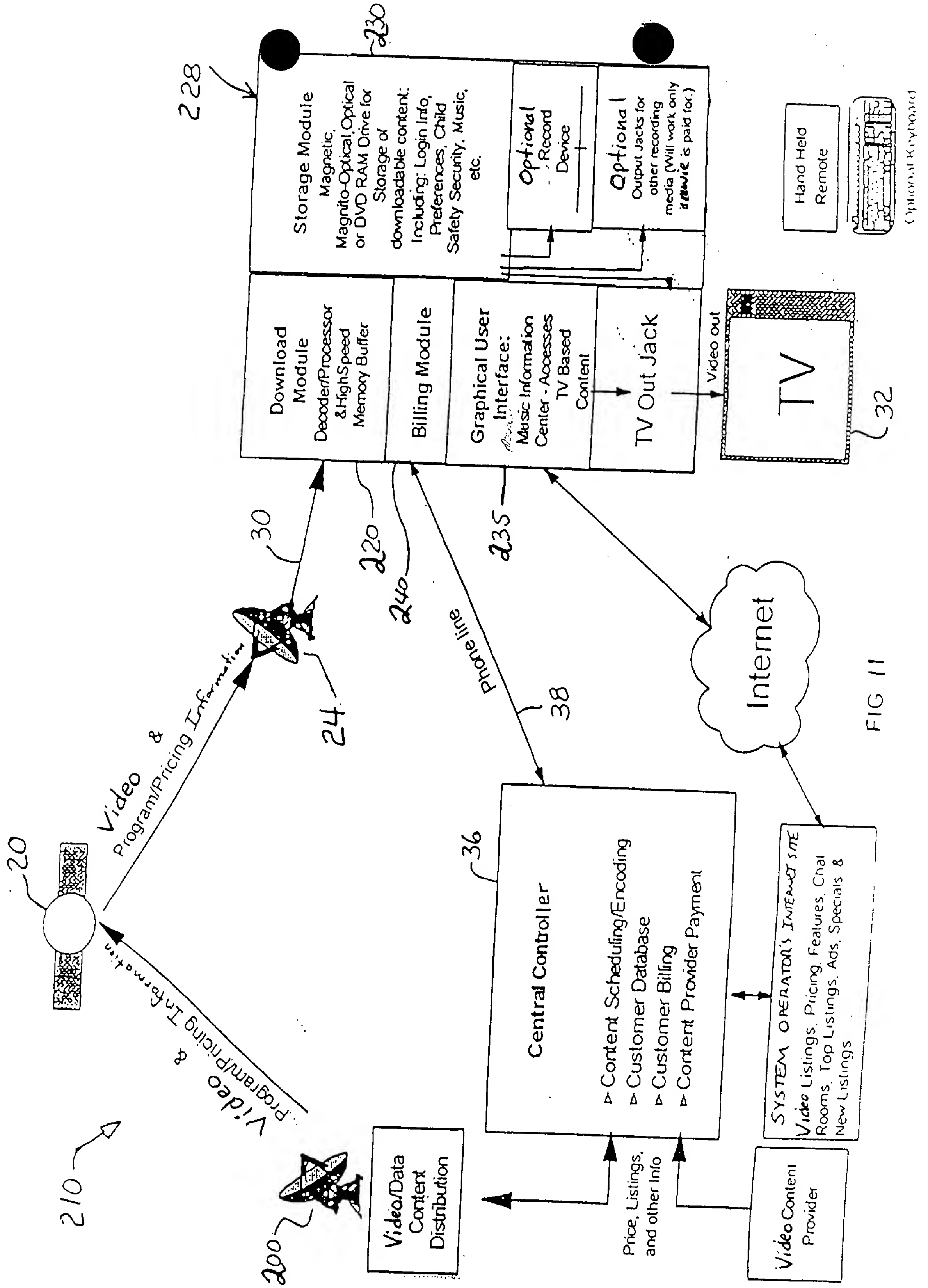


FIG. 11

Step	Mode Name	Description	Hardware Involved
	Account Setup	Happens when customer buys and hooks up The user station.	
1	Selection	Customer looks at recently updated "catalog" of available movie selections on his TV using the graphical user interface. Use remote to page through information.	User station, remote, customer TV, stored catalog
2	Ordering	Customer uses user station, remote and TV screen to order	User station, remote, customer TV
3	Downloading	Movies are downloaded during transmission hours as encrypted, compressed files through customer's satellite dish to hard disk in user station.	User station, satellite receiver
4	Viewing	Customer plays movie directly from hard drive with decryption/decompressing in real time.	User station, customer TV and speakers
5	Billing	Customer's account billed later by modem or Internet communication with central controller.	User station
6	Optional "Library" Movie Delivery	Full-quality movie on selected medium (e.g. DVD) that can be played on any DVD player is burned with watermark.	User station, DVD burner

Fig. 12

SELECT MOVIE TYPE PREFERENCES	
Action	Documentaries
Romantic Comedy	Foreign Language
Science Fiction	Musicals
Combat	Westerns
Animated	Political
Family (G)	Suspense

Fig. 13

SECOND LEVEL MOVIE PREFERENCES			
Favorite Movie Stars (Male)	Favorite Movie Stars (Female)	Favorite Directors	Preferred Rating(s)
Mel Gibson Tom Hanks ↓	Julia Roberts Meg Ryan ↓	George Lucas John Doe ↓	G PG PG-13 R X

Fig. 14

Download Module

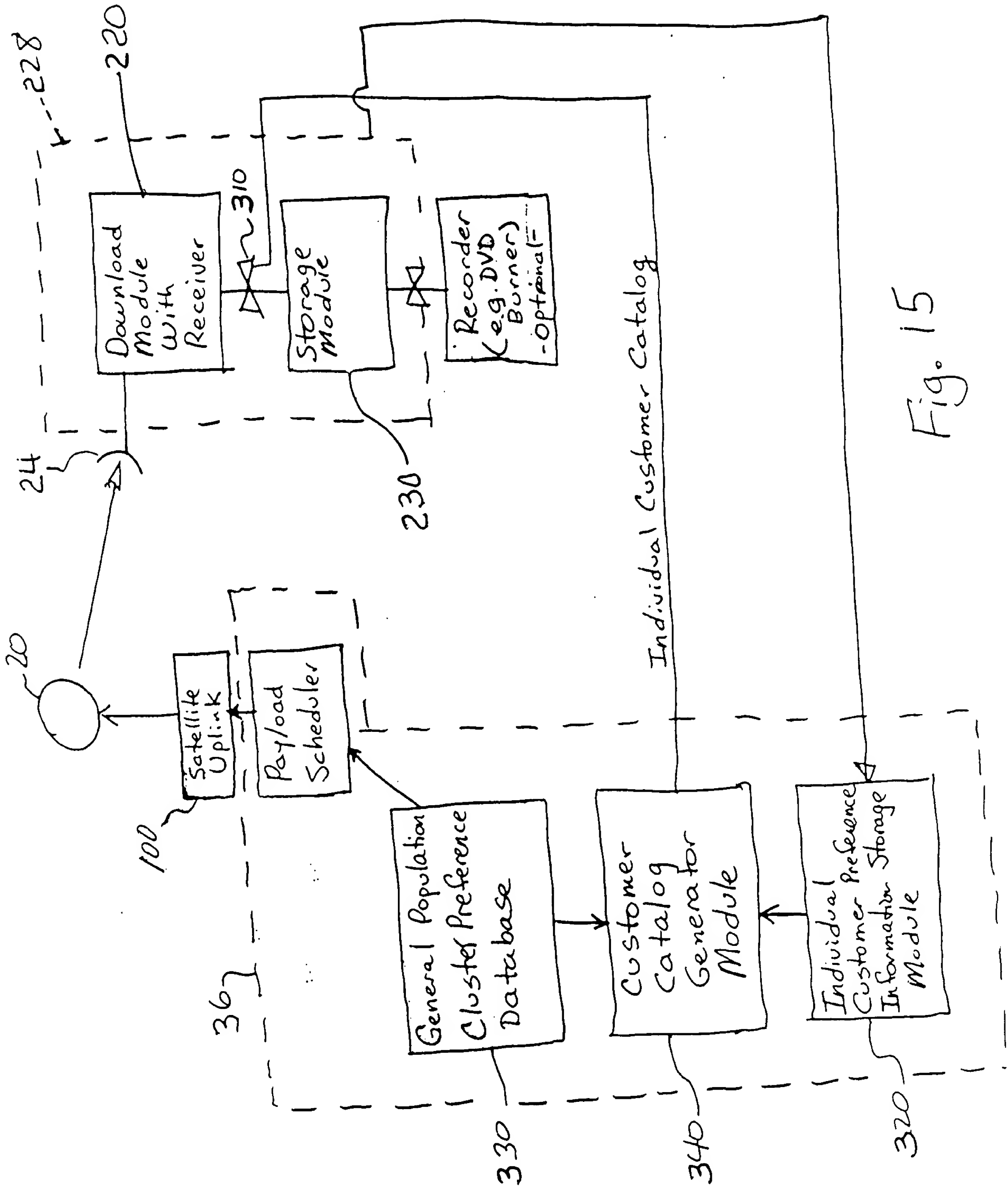
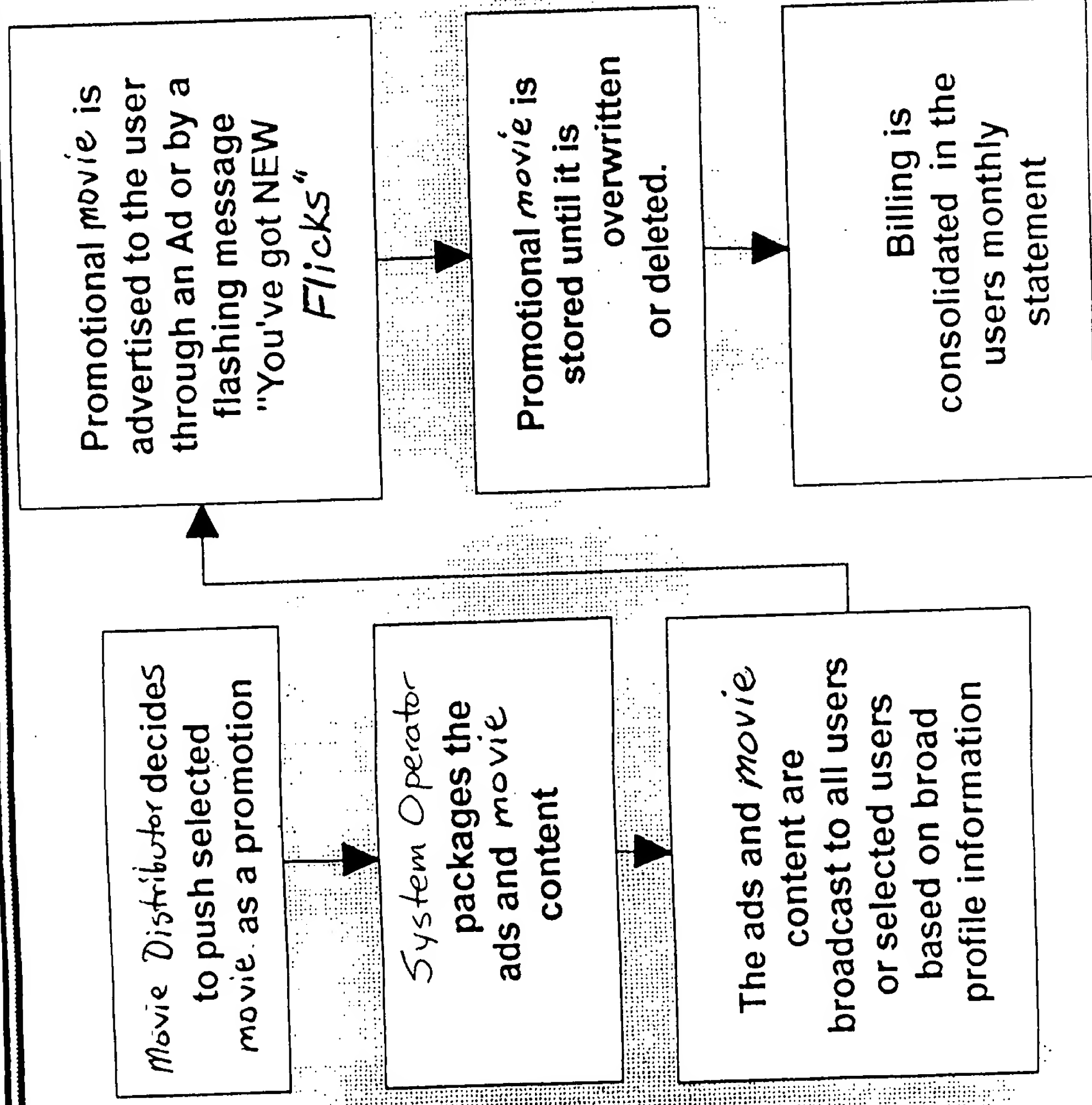


Fig. 15

Promotion-based Streaming



- ✓ 1/4 of a Transponder
- ✓ Promotional movie can be sent to all or targeted users that will likely buy.
- ✓ Customers are informed when they have NEW movies - each time they surf channels.
- ✓ Sound Track Promotions can also be coordinated with movie schedules
- ✓ Download time is instantaneous

Fig. 16

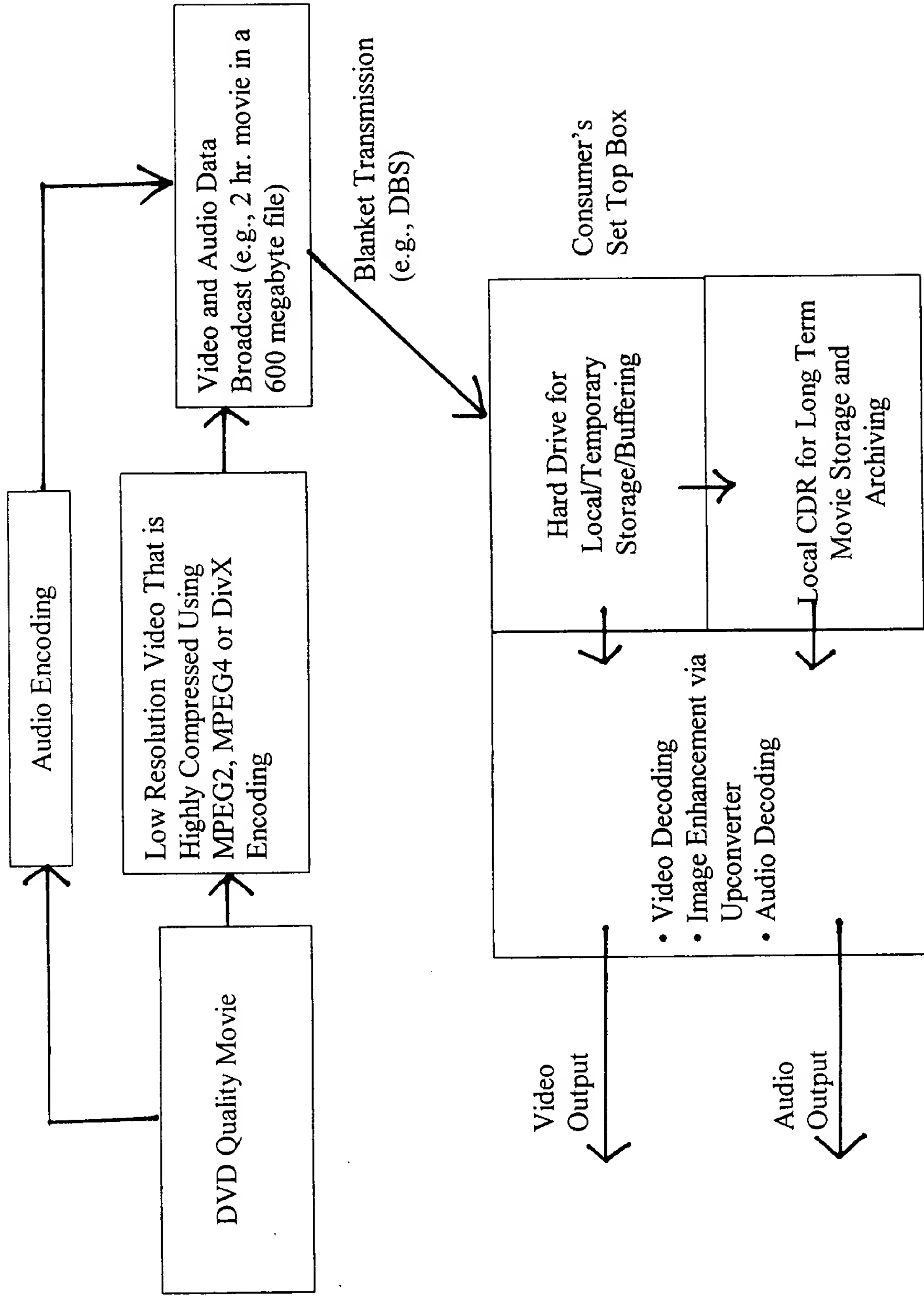


Figure 17

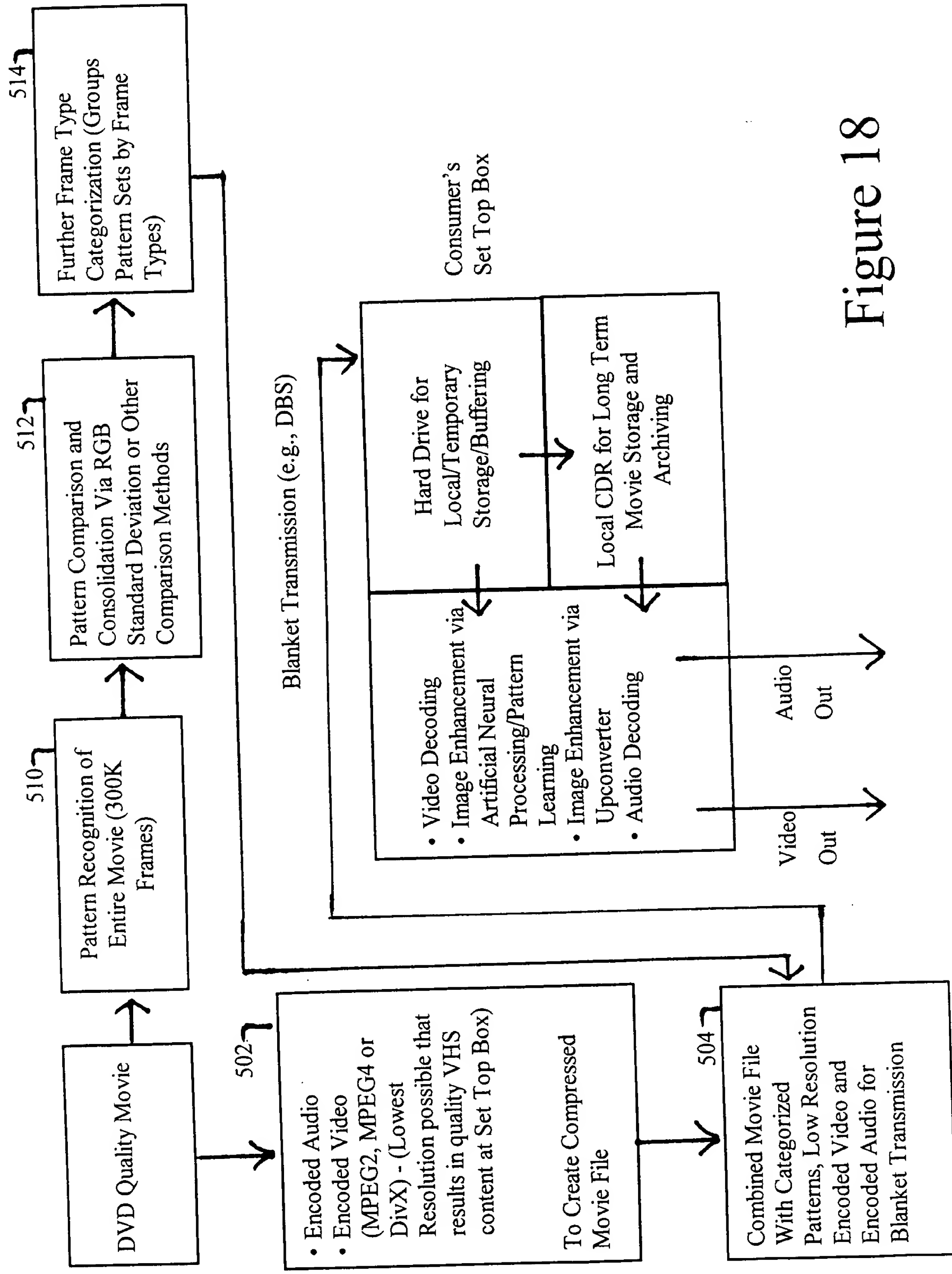


Figure 18

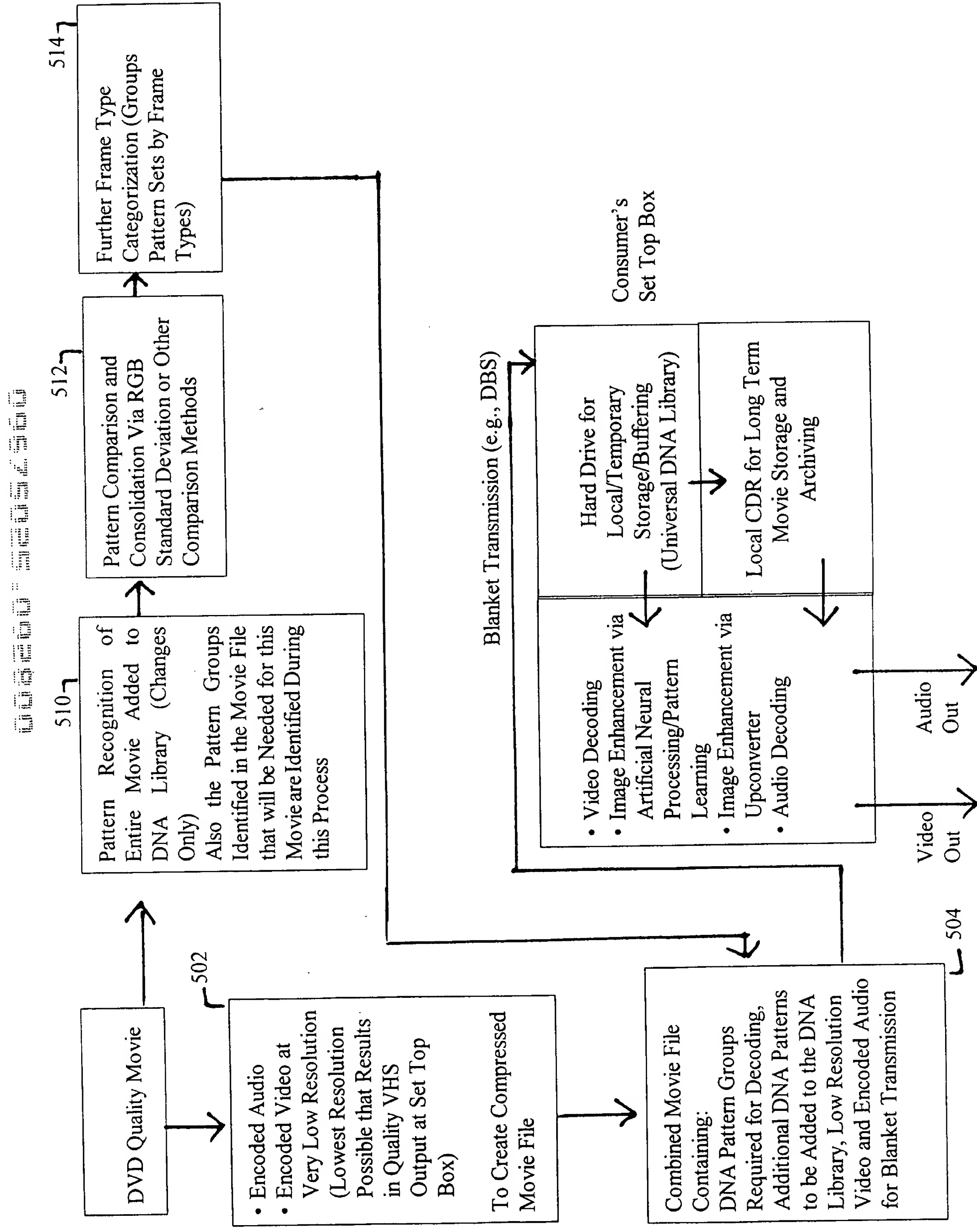
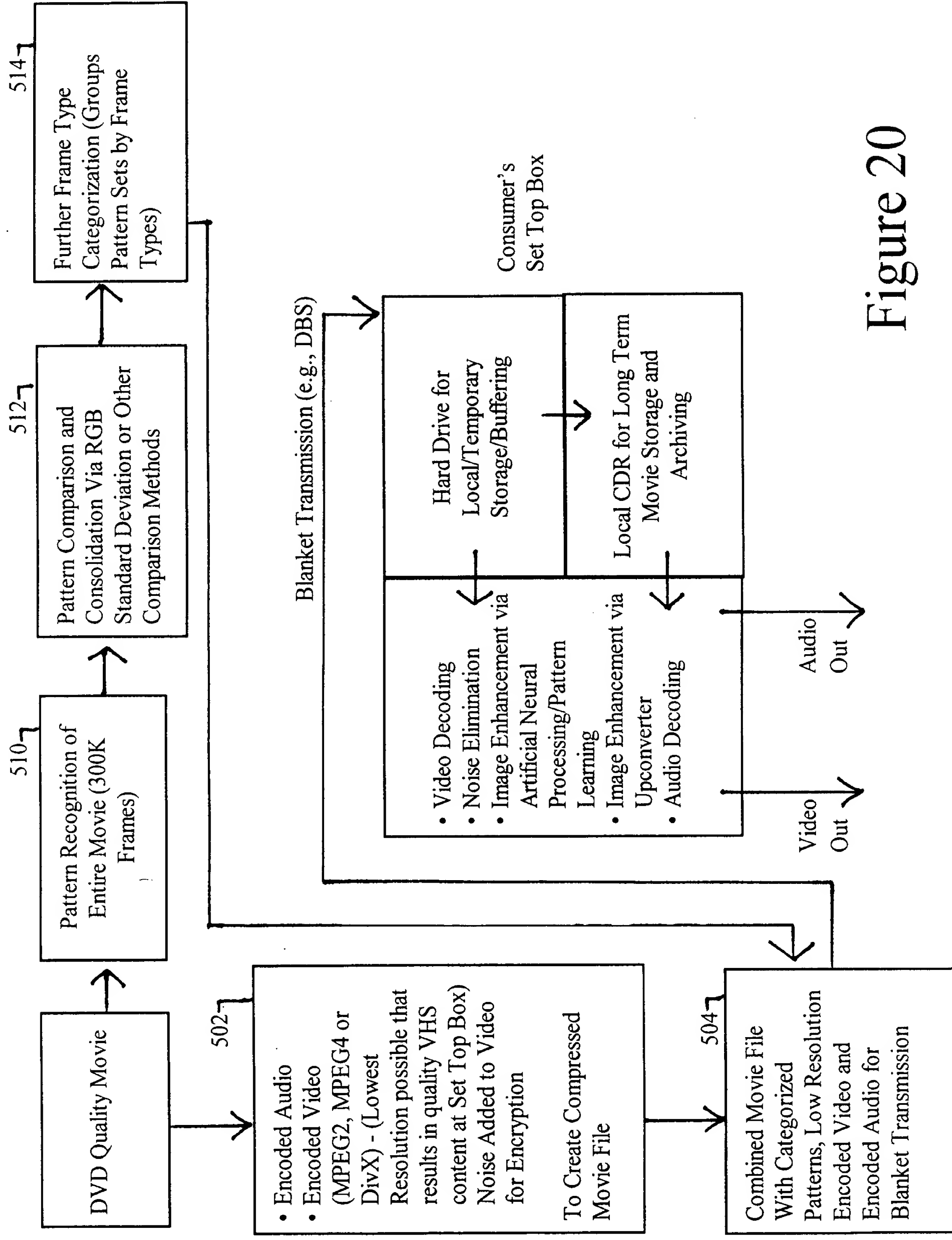


Figure 19



DNA Pattern Library

Frame Group 1	Frame Group 2	Frame Group 3	Frame Group n
Pattern 1	Pattern 1	Pattern 1		Pattern 1
Pattern 2	Pattern 2	Pattern 2		Pattern 2
Pattern 3	Pattern 3	Pattern 3		Pattern 3
•	•	•		•
•	•	•		•
•	•	•		•
Pattern N	Pattern N	Pattern N		Pattern N

Figure 21

Video Content File

- Required Frame Groups: 1, 4, 7, 9, ... n
- Additional Patterns to be Added to DNA Library Groups
- Highly Compressed/Noise Added Video File

Figure 22

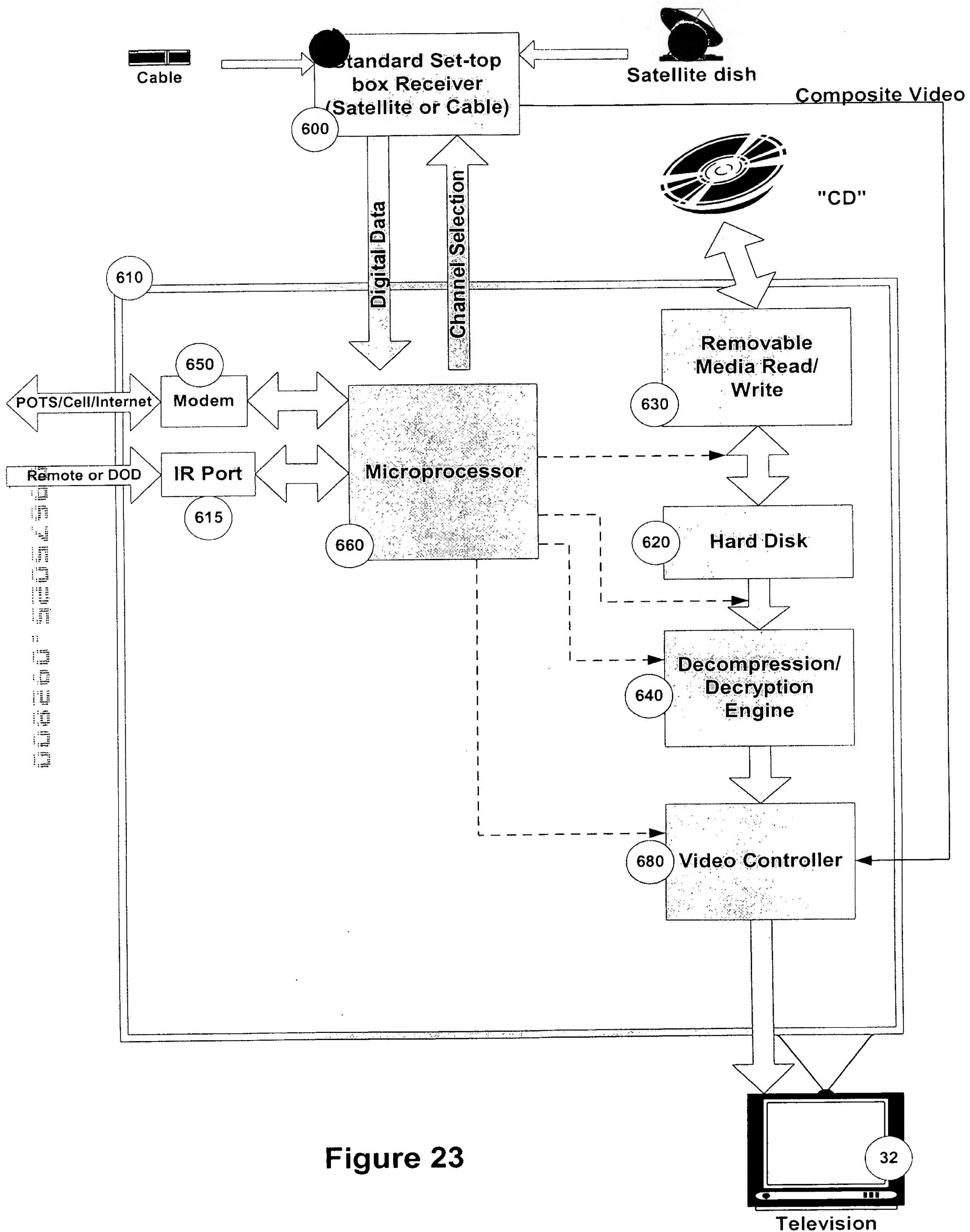


Figure 23

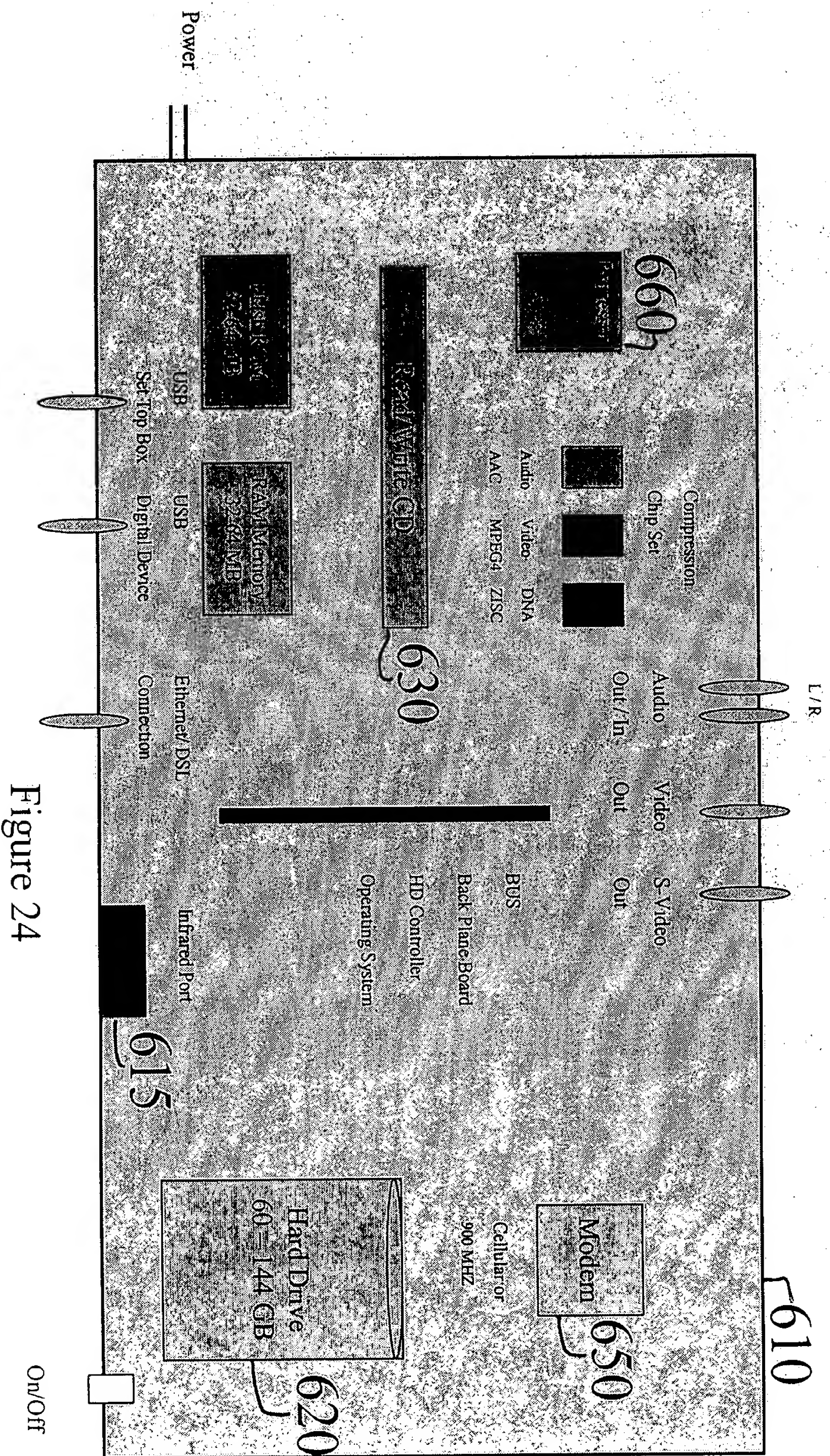


Figure 24

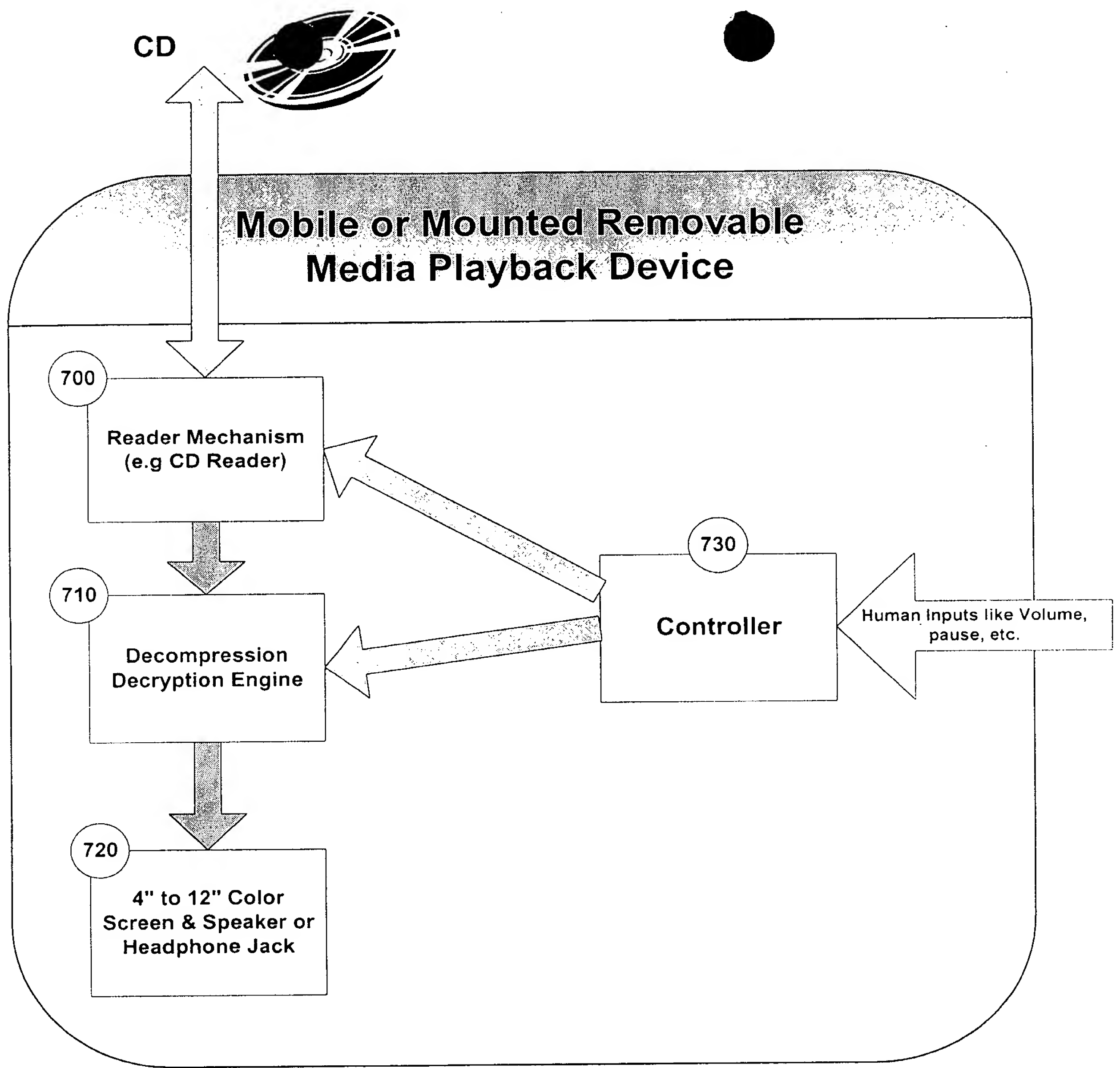


Figure 25

